

WE CLAIM:

1                    1.     A hydrophilic polymeric medical article which has been  
 2     impregnated with a treatment solution comprising (i) between about 1 and 10 percent of a  
 3     hydrophilic polymer; (ii) between 1 and 5 percent of chlorhexidine, wherein the  
 4     chlorhexidine consists essentially of a mixture of chlorhexidine free base and a  
 5     chlorhexidine salt; and (iii) between .5 and 5 percent of triclosan.

1                    2.     The medical article of claim 1 which is fabricated from a  
 2     hydrophilic polymer selected from the group consisting of natural rubber latex and  
 3     biomedical polyurethane.

1                    3.     The medical article of claim 1 wherein the hydrophilic polymer in  
 2     the treatment solution is a biomedical polyurethane.

1                    4.     The medical article of claim 2 wherein the hydrophilic polymer in  
 2     the treatment solution is a biomedical polyurethane.

1                    5.     A hydrophilic polymeric medical article which has been  
 2     impregnated with a treatment solution comprising (i) between about 1 and 10 percent of a  
 3     hydrophobic polymer; (ii) between 1 and 5 percent of chlorhexidine, wherein the

4 chlorhexidine consists essentially of a mixture of chlorhexidine free base and a  
5 chlorhexidine salt; and (iii) between .5 and 5 percent of triclosan.

1 6. The medical article of claim 5 which is fabricated from a  
2 hydrophilic polymer selected from the group consisting of natural rubber latex and  
3 biomedical polyurethane.

1 7. The medical article of claim 5 wherein the hydrophobic polymer in  
2 the treatment solution is a biomedical silicone polymer.

1 8. The medical article of claim 6 wherein the hydrophobic polymer in  
2 the treatment solution is a biomedical silicone polymer.

1 9. The medical article of claim 5 wherein the hydrophobic polymer in  
2 the treatment solution is a silicone-polyurethane copolymer.

1 10. The medical article of claim 6 wherein the hydrophobic polymer in  
2 the treatment solution is a silicone-polyurethane copolymer.

1 11. A hydrophobic polymeric medical article which has been  
2 impregnated with a treatment solution comprising (i) between about 1 and 10 percent of a  
3 hydrophobic polymer; between 1 and 5 percent of chlorhexidine, wherein the

4 chlorhexidine consists essentially of a mixture of chlorhexidine free base and a  
5 chlorhexidine salt; and (iii) between .5 and 5 percent of triclosan.

1 12. The medical article of claim 11 which is fabricated from a  
2 hydrophobic polymer selected from the group consisting of polytetrafluoroethylene,  
3 Dacron, polyvinylchloride, biomedical silicone polymer, and silicone polyurethane  
4 copolymer.

1 13. The medical article of claim 11 wherein the hydrophobic polymer  
2 in the treatment solution is a biomedical silicone polymer.

1 14. The medical article of claim 12 wherein the hydrophobic polymer  
2 in the treatment solution is a biomedical silicone polymer.

1 15. The medical article of claim 11 wherein the hydrophobic polymer  
2 in the treatment solution is a silicone-polyurethane copolymer.

1 16. The medical article of claim 12 wherein the hydrophobic polymer  
2 in the treatment solution is a silicone-polyurethane copolymer.

1 17. A hydrophobic polymeric medical article which has been  
2 impregnated with a treatment solution comprising (i) between about 1 and 10 percent of a

3 hydrophilic polymer; (ii) between 1 and 5 percent of chlorhexidine, wherein the  
4 chlorhexidine consists essentially of a mixture of chlorhexidine free base and a  
5 chlorhexidine salt; and (iii) between .5 and 5 percent of triclosan.

1 18. The medical article of claim 17 which is fabricated from a  
2 hydrophobic polymer selected from the group consisting of polytetrafluoroethylene,  
3 Dacron, polyvinylchloride, biomedical silicone polymer, and silicone polyurethane  
4 copolymer.

1 19. The medical article of claim 17 wherein the hydrophilic polymer is  
2 a biomedical polyurethane.

1 20. A method of preparing an infection resistant medical article  
2 comprising:  
3 (i) placing the medical article in an impregnating solution  
4 comprising (a) a solvent selected from the group consisting of water, reagent alcohol,  
5 tetrahydrofuran, and mixtures thereof; and (b) chlorhexidine and triclosan in a molar ratio  
6 of between 1:1 and 1:3, wherein the total weight of chlorhexidine and triclosan is  
7 between 1 and 10 percent of the weight of the impregnating solution and wherein the  
8 chlorhexidine consists essentially of a mixture of chlorhexidine free base and a  
9 chlorhexidine salt;

10 (ii) soaking the medical article in the impregnating solution for a  
11 period of time sufficient to allow the medical article to swell and to incorporate the  
12 chlorhexidine and triclosan;

13 (iii) removing the medical article from the impregnating solution;  
14 and

15 (iv) drying the medical article.

1 21. The method of claim 20, wherein the solvent in step (1)(a) is a  
2 mixture of reagent alcohol and tetrahydrofuran.

1 22. The method of claim 20, wherein the ratio of chlorhexidine free  
2 base and triclosan in step (1) (b) is about 1:2.

1 23. The method of claim 20, wherein the total weight percent of  
2 chlorhexidine free base and triclosan in step (1) (b) is about 2-10.

1 24. The method of claim 20, which has further been coated with a  
2 coating solution comprising a biomedical polymer.

1 25. The method of claim 24, wherein the biomedical polymer in the  
2 coating solution comprises an antimicrobial agent.

- 1                    26.    The method of claim 20 which is fabricated from polyurethane.
- 1                    27.    The method of claim 26 which is a polyurethane catheter.
- 1                    28.    The method of claim 27 in which both the external and internal  
2 surfaces of the catheter are brought into contact with the impregnating solution.
- 1                    29.    The method of claim 27 in which only the external surface of the  
2 catheter is brought into contact with the impregnating solution.
- 1                    30.    The method of claim 27, in which only the internal surface of the  
2 catheter is brought into contact with the impregnating solution.